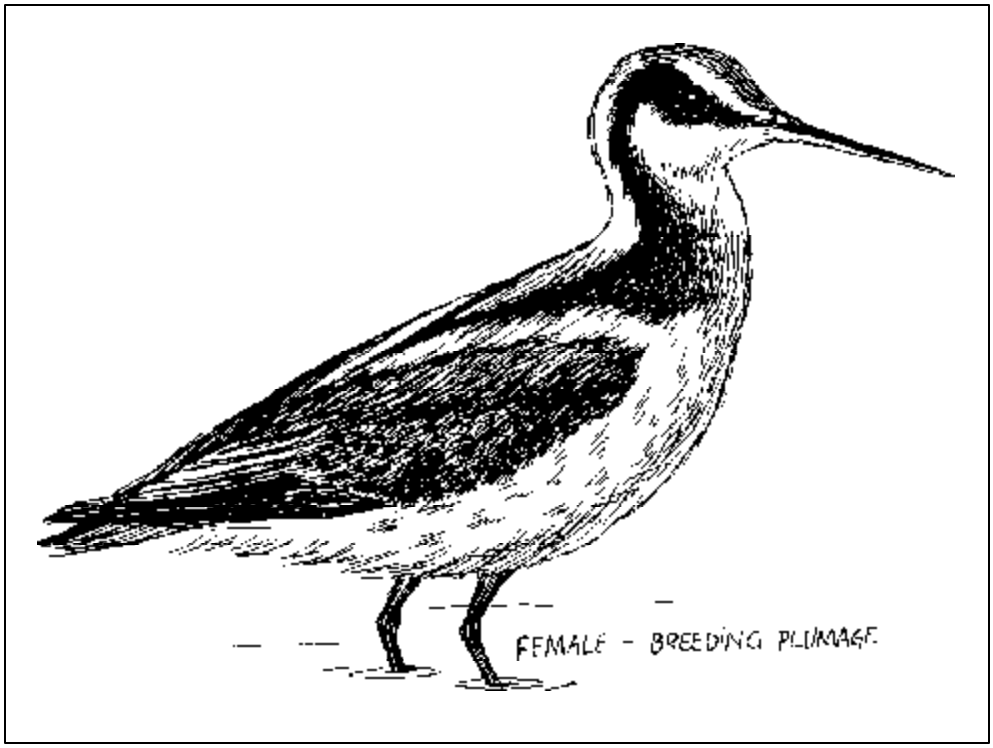
Wilson's Phalarope

(Phalaropus tricolor)



In recognition of the tremendous value of the Great Salt Lake ecosystem to Wilson's phalaropes and other shorebird populations, the Western Hemisphere Shorebird Reserve Network has designated the Great Salt Lake as a Hemispheric Site.

The Wilson's phalarope is a small wading bird which migrates through Utah in extremely large numbers. More than 500,000 of these shorebirds visit the Great Salt Lake annually, relying heavily on the rich food resources available in the productive wetland and aquatic habitats of the saline lake. The Great Salt Lake is the largest staging area in the world for Wilson's phalaropes.

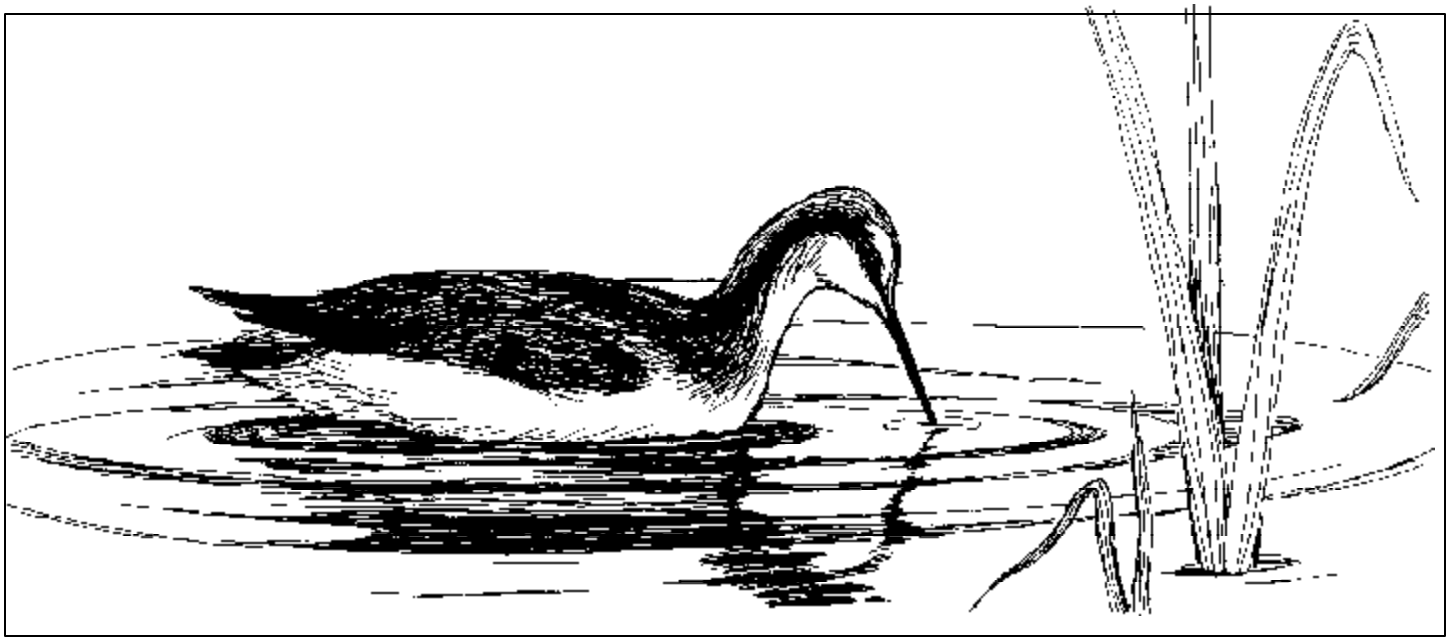
Wilson's phalaropes are just one of many shorebird species which depend on the Great Salt Lake as a valuable source of food and as a staging area where they feed, rest and molt at critical times during long range migrations. In all, the Great Salt Lake may attract two to five million shorebirds each year, including Wilson's and red-necked phalaropes, American avocets, black-necked stilts, long-billed dowitchers, snowy and black-bellied plovers, marbled godwits, willets, sanderlings, western sandpipers, Baird's sandpipers and least sandpipers.

Description

There are three species of phalaropes in the Family Phalaropodidae, including the Wilson's phalarope, red-necked phalarope and the red phalarope.

Wilson's phalaropes *(Phalaropus tricolor)* are the largest of the three phalaropes, ranging from 7 1/2 to 10 inches in length. Wingspread averages 14 1/2 to 16 inches. Phalaropes vary in weight from 1 3/4 ounces for males to 2 1/2 ounces for females. Also called the "summer phalarope," this shorebird has a long, thin bill and a bold blackish stripe on its face and neck. When in breeding plumage, the female is much larger and more brightly colored than the male. On the female, the broad, black stripe streaks from the bill through the eyes down the sides of the neck and blends into cinnamon or chestnut-red coloration extending from her sides onto her breast. Underparts of both sexes are white. In flight, this dark-winged phalarope shows no white stripe in its wings and has a white rump. Its thin black bill is longer than in other phalaropes. In fall and winter, both males and females are gray above and white below, with a white streak above each eye.

The Wilson's phalarope is the most terrestrial of all the phalaropes, feeding as often on land as on water. Wilson's phalaropes prefer inland lakes, marshes and reservoirs for feeding and nesting. Whereas the other phalaropes spend their winters at sea, Wilson's phalaropes typically winter on inland lakes in South America.



Feeding Habits

Wilson's phalaropes often feed while walking on muddy shores, wading in shallow water or swimming in deep water. While feeding on land, phalaropes walk quickly, picking invertebrates from the mud with a quick, repeated spearing motion. While wading, they sometimes probe into the mud with head submerged. When swimming, phalaropes often are seen whirling about in circles on the water, spearing prey at or near the surface. Wilson's phalaropes have been observed spinning at as many as 60 revolutions a minute. In shallow water, this spinning or "pirouetting" is thought to stir up food lodged on the bottom. Phalaropes feed generally on larvae of mosquitos, larvae of crane flies and diving beetles. On the Great Salt Lake, phalaropes feed primarily on the abundant brine shrimp and brine flies. They also will eat seeds of various aquatic plants.

Life Cycle

Wilson's phalaropes are long distance migrants. Each spring they travel 5000 miles from their principal wintering grounds on the high altitude lakes of the central Andes in Argentina to their nesting grounds in the northern Great Plains of the United States and southern Canada. At the Great Salt Lake, phalaropes arrive in late spring for a brief stop on their way to their nesting grounds.

Among phalaropes, the sex roles are reversed when compared to many other avian species. In addition to the females being larger and more brightly colored than the males, females also take the initiative in courtship. On the nesting grounds, a female courting a male follows him wherever he swims. If another female approaches, the first female lowers her head and swims toward the intruder. Actual fights are rare, but if the intruder comes too close, the first female flies toward her, with neck extended and legs dangling. This usually discourages further competition for that male.

Females usually lay three to four eggs after a nest is built in a well-concealed grass-lined hollow near a freshwater marsh, slough, wet meadow, pond or on an island. The prairie pothole country of the northern Great Plains and southern Canada provides the major nesting grounds for Wilson's phalaropes, although some phalaropes nest near freshwater ponds and pools in Utah.

Continuing the reversal of sex roles, the males, rather than the females, incubate the eggs. They also raise the chicks. Soon after laying the eggs, the females begin their southward migration, well ahead of the males and their young. By mid-June, female phalaropes assemble in flocks, ready for the first leg of their journey.

While at the Great Salt Lake, phalaropes feed and molt. They roost on the shoreline, forage near the shore for brine flies, or fly to deeper water to feed on the great quantities of brine shrimp. For many species of shorebirds, molting is a gradual process which usually requires several months. For Wilson's phalaropes, molting replaces the body feathers in only 35 to 40 days. Migration requires that phalaropes store large amounts of fat and molt in a very short period of time. The abundant availability of brine flies and shrimp provides the energy resources they need to accomplish this. Adult phalaropes may actually double their body weight before leaving the Great Salt Lake. When they leave, they make a remarkable non-stop flight to the northern coast of South America.

By mid-July, the males begin to arrive in significant numbers at the Great Salt Lake. The young birds follow to join the flocks in peak abundance in late July. On July 26, 1991, biologists estimated that a total of 600,000 Wilson's phalaropes were concentrated on the Great Salt Lake. The largest concentrations included 274,760 phalaropes at Bear River Bird Refuge, 161,980 at Ogden Bay and 156,460 at the Kaysville/Layton marsh. The majority of phalaropes were found at or near the shoreline in bulrush stubble where there was an abundance of brine flies.

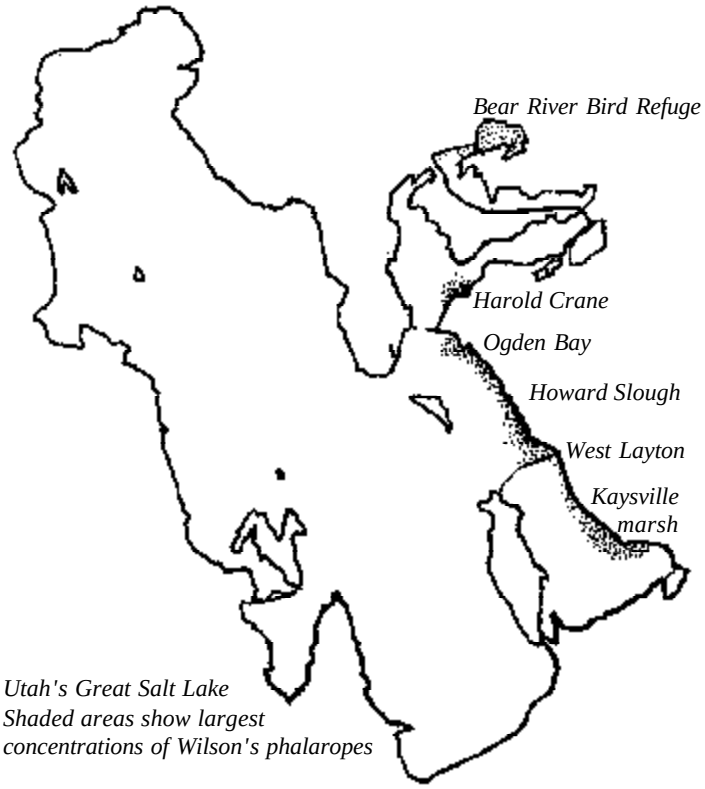
In late summer, females leave the Great Salt Lake first, followed a short time later by the males and juveniles. Most Wilson's phalaropes will have migrated from the Great Salt Lake by the end of August.

Current Status and Management

Wilson's phalaropes and all shorebirds are protected by the federal Migratory Bird Treaty Act and the Utah Wildlife Code. Responsibility for the management of shorebird species in Utah lies with the Wildlife Section within the Utah Division of Wildlife Resources. Several strategies have been implemented to monitor and manage shorebird populations. These include:

- surveys of spring and fall shorebird populations in cooperation with the Great Salt Lake Waterbird Survey Team
- research studies with Hubbs-Sea World Research Institute to determine the importance of the Great Salt Lake to Wilson's phalarope populations
- graduate research studies investigating the ecology of the Great Salt Lake
- a cooperative effort between the Division of Wildlife Resources and Utah State University to determine the status of shorebird populations in Utah
- research of brine shrimp resources and their relationship to shorebird populations by the Great Salt Lake Ecosystem Project
- identification of critical wetland habitats associated with the Great Salt Lake

The current designation of the Great Salt Lake as a Western Hemisphere Shorebird Reserve brings international recognition and support for local conservation efforts and wetland management.



Utah's Great Salt Lake
Shaded areas show largest concentrations of Wilson's phalaropes

What You Can Do

For the best opportunity to view large numbers of Wilson's phalaropes, plan to visit the Great Salt Lake from mid-June through August. Sites along the eastern shore offer the greatest concentrations of phalaropes, especially in late July and early August. Suggested areas, which are easily reached, include Bear River Bird Refuge, Harold Crane Waterfowl Management Area (W.M.A.), Ogden Bay W.M.A., Howard Slough W.M.A., West Layton W.M.A., West Kaysville marsh and the eastern side of the Antelope Island Causeway.

Maps and directions to Ogden Bay W.M.A. and the Harold Crane W.M.A. are found in the Utah Wildlife Viewing Guide, available for $5.95 at Division of Wildlife Resources offices.

For field trip opportunities to visit the Great Salt Lake or to become involved in conservation initiatives affecting Utah's shorebirds, contact local Audubon and nature study groups.

For more information about Wilson's phalaropes and other shorebird populations in Utah, contact the Utah Division of Wildlife Resources Northern Region Office, I & E Manager, 515 East 5300 South, Ogden, UT 84405 (801) 476-2750 or the Utah Division of Wildlife Resources, Avian Coordinator, 1594 West North Temple, Suite 2110, Salt Lake City, UT 84116 (801) 538-4764.

The Great Salt Lake Is Recognized as a Western Hemisphere Shorebird Reserve

The Great Salt Lake ecosystem was officially recognized by the Western Hemisphere Shorebird Reserve Network (WHSRN) as a Hemispheric Site in the spring of 1991. This significant designation identified the Great Salt Lake as a valuable link in an international chain of sites that provide critical habitats for shorebirds.

The WHSRN is a voluntary collaboration of over 140 government and private organizations that are committed to shorebird conservation. The WHSRN recognizes that wetlands are among the world's most productive environments, providing tremendous natural and economic benefits. Shorebirds rely on these areas for their survival and serve as indicators of our quality of stewardship.

Currently, WHSRN Reserves collectively protect over 30 million shorebirds and nearly 10 million acres of critical habitat. WHSRN sites include 40 reserves in Argentina, Brazil, Peru, Surinam, Mexico and Canada, and 23 sites in 16 U.S. states. The "Hemispheric" site designation of the Great Salt Lake is the highest of three WHSRN recognized levels. Sites are classified according to the number of shorebirds hosted. "Hemispheric" sites, which are fewest in number, provide vital habitat for at least 500,000 birds every year. The other two recognized levels are "International" sites, which host at least 100,000 shorebirds per year and "Regional" sites, which host over 20,000 shorebirds per year. As a network, the WHSRN sites represent the most critical areas where limited funds and time must be focused to conserve migratory shorebirds and the vital wetland habitats upon which they depend.

The Great Salt Lake ecosystem qualifies for this international recognition because it supports well over two million shorebirds as well as at least three and a half million waterfowl. The World's largest staging concentration of Wilson's phalaropes (over 500,000 birds), 300,000 red-necked phalaropes and 250,000 American avocets highlight the 30 species of shorebirds that depend upon the Great Salt Lake for feeding, migration and breeding. In mid to late summer, these species congregate on the lake in dramatic numbers, totaling more than a million individuals at times.

In further acknowledgement of the hemispheric significance of the Great Salt Lake to migrating shorebirds, the Great Salt Lake has been identified as a Sister Reserve to Laguna del Mar Chiquita in Argentina. Along with other shorebirds, more than 500,000 Wilson's phalaropes winter on this South American lake. The Sister Reserve designation highlights the international and ecological union between these two sites and emphasizes the importance of the hemispheric chain of habitats critical to shorebird survival.

The Great Salt Lake is also linked with Chaplin Lakes in Saskatchewan, Canada and Marismas Nacionales in western Mexico to cooperate in shorebird population monitoring, habitat management and public outreach and education programs. These three sites each host American avocets, black-necked stilts and other shorebirds at different times of the year.

For more information about the WHSRN, write the Manomet Center for Conservation Science, P.O. Box 1770, Manomet, MA 02345. Details about the WHSRN and shorebird conservation are also available at http://www.manomet.com/whsrn.htm. For more information about the Great Salt Lake and its designation as a Hemispheric Site, contact the Avian Program Coordinator of the Utah Division of Wildlife Resources.

Wildlife Notebook Series No. 6 written and edited by Brenda Schussman; reviewed by Don Paul, Great Salt Lake Wildlife Biologist, and Frank Howe, Avian Program Coordinator; and illustrated by Jill Rensel. (Images may not be reproduced)

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